

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number
WO 2005/079867 A2

- (51) International Patent Classification⁷: **A61K 51/02**,
A61P 35/00
- (21) International Application Number:
PCT/GB2005/000616
- (22) International Filing Date: 18 February 2005 (18.02.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0403856.8 20 February 2004 (20.02.2004) GB
60/546,878 23 February 2004 (23.02.2004) US
- (71) Applicant (*for all designated States except US*): **ALGETA AS** [NO/NO]; P.O.Box 54, Kjelsås, N-0411 Oslo (NO).
- (71) Applicant (*for GB only*): **GODDARD, Chris** [GB/GB]; Frank B. Dehn & Co., 179 Queen Victoria Street, London EC4V 4EL (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **SALBERG, Gro** [NO/NO]; Egnehemun 27, N-0196 Oslo (NO). **LARSEN, Roy** [NO/NO]; Lunden 20, N-0598 Oslo (NO).
- (74) Agent: **FRANK B. DEHN & CO.**; 179 Queen Victoria Street, London EC4V 4EL (GB).
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— *without international search report and to be republished upon receipt of that report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: ALPHA-EMITTING HYDROXYAPATITE PARTICLES

(57) Abstract: The present invention provides Hydroxyapatite (HA) incorporating an alpha-emitting radionuclide or an *in vivo* generator for an alpha-emitting radionuclide. The invention further provides methods for the formation of such HA, pharmaceutical compositions comprising the HA and methods of medical treatment of cancerous or noncancerous disease including administering the HA or compositions thereof.



WO 2005/079867 A2